

REMARKS

Claims 1-17 are pending in this application. Claims 1, 7, and 13 are currently amended. The amended claims are supported by the application as originally filed, with no new matter being added. Reconsideration of the pending claims is respectfully requested in light of the following remarks.

The specification has been amended to change the Title and the Abstract as required by the Examiner.

Rejections Under 35 U.S.C. § 112

Claims 1-17 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The current amendment to claim 1 should now clarify the limitation pointed out by the Examiner on page 1 of the Office Action.

The current amendments to claims 7 and 13 should now provide proper antecedent basis for the limitations pointed out by the Examiner on page 1 of the Office Action.

Accordingly, Applicant respectfully requests that the rejection of claims 1-17 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejections Under 35 U.S.C. § 102

Claims 1, 2, 4, 5, 9, and 14 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,940,029 to Ninomiya et al. (hereafter “Ninomiya”). Applicant respectfully traverses.

Claim 1 has been amended to recite, *inter alia*, that a radar apparatus comprises:

a signal characteristic checking unit which compares two output signals selected from among said first to nth output signals that were output based on said received signal received by a particular antenna selected from among said plurality of antennas, and thereby checks for differences between characteristics of first to nth receiver circuit systems respectively comprised of the filter circuit

and the AD converter, based on changes in characteristics of said first to nth output signals, and corrects for any difference in the characteristic of each receiver circuit system.

Ninomiya discloses that in “the receiver unit that employs the active phased array technique, the combined radiation pattern is controlled by controlling the amount of phase shift and the amount of amplitude adjustment of each antenna reception signal, thus making it possible to change the direction of radar detection. Further, by changing the amount of phase shift and the amount of amplitude adjustment continuously, continuous control of the direction of radar detection also becomes possible.” (Column 2, lines 24 to 32).

Ninomiya further teaches that “phase shifters 21_1 - 21_N and amplitude adjusters 22_1 - 22_N subject the digital data that has entered from the A/D converters 20_1 - 20_N to the phase shifts Φ_1 - Φ_N and amplitude adjustment values A_1 - A_N , and the adder 25 combines the signals output by the amplitude adjusters 22_1 - 22_N and inputs the result to a processing unit (not shown), which is the next stage. The processing unit executes target detection processing. By thenceforth repeating the foregoing control while successively changing the search direction, the direction in which the target lies can be detected.” (Column 12, lines 45 to 55).

According to the above descriptions, in the radar apparatus of *Ninomiya*, the phase shifters 21_1 - 21_N merely shift phases of digital data in accordance with controlling of phase control circuit 23, and amplitude adjusters 22_1 - 22_N adjust amplitudes of digital data in accordance with controlling of amplitude control circuit 24. Additionally, in the radar apparatus of *Ninomiya*, differences in characteristics between a plurality of receiver circuit systems respectively comprised of an intermediate-frequency filter and A/D converter are not checked based on a change in characteristics of output signals from A/D converters, and further, the characteristic of each receiver circuit system is not corrected based on the differences.

Thus, there is no teaching or suggestion in *Ninomiya* that a signal characteristic checking unit checks for “differences between characteristics of first to nth receiver

circuit systems respectively comprised of the filter circuit and the AD converter, based on changes in characteristics of said first to nth output signals, and corrects for any difference in the characteristic of each receiver circuit system” as now recited in claim 1. Accordingly, claim 1 is not anticipated by *Ninomiya*.

Since claims 2, 4, 5, 9, and 14 depend from claim 1, claims 2, 4, 5, 9, and 14 include all of the limitations of claim 1. As discussed above, there is no teaching or suggestion in *Ninomiya* of all the limitations now recited in claim 1. Accordingly, not all of the limitations of respective dependent claims 2, 4, 5, 9, and 14 are met. Thus, these dependent claims are also not anticipated by *Ninomiya*.

Applicant therefore respectfully requests that the rejection of claims 1, 2, 4, 5, 9, and 14 under 35 U.S.C. § 102(b) be withdrawn.

Serial No.: 10/596,096

Filing Date: 5/30/2006

Attorney Docket No. 515.039US01

Title: RADAR APPARATUS

CONCLUSION

Applicant respectfully submits that claims 1-17 are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: January 22, 2008

/GREGORY M. TAYLOR/

Gregory M. Taylor
Reg. No. 34,263

Attorneys for Applicant
Fogg & Powers LLC
P.O. Box 581339
Minneapolis, MN 55458-1339
T – (612) 332-4720
F – (612) 332-4731